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M E M O R A N D U M  
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TO: The Board of Oil, Gas and Mining  
FROM: *TJS for* Thomas J. Suchoski, Engineering Geologist  
SUBJECT: A.U. Associates  
Rocking Chair Mine  
ACT/045/014  
DATE: October 21, 1980

The Division of Oil, Gas and Mining has reviewed the Mining and Reclamation Plan submitted by A.U. Associates for the Rocking Chair Mine and feels the plan meets the requirements of the Utah Mined Land Reclamation Act. The Division seeks the Board's concurrence on the amount and form of surety, tentative approval, and, pending no adverse public comment, issuance of final approval. An Executive Summary is enclosed for your review and information.

TJS/te

Enc: Executive Summary

EXECUTIVE SUMMARY  
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A.U. Associates  
Rocking Chair Mine  
ACT/045/014  
Sections 9, 10, 14-16, 21-23, 28, 33 and 34,  
Township 8 South, Range 18 West  
Tooele County, Utah

LOCATION:

A.U. Associates is proposing an open-pit gold and silver mine and processing facility in the Ibapah area. The surface facilities will be located in Section 28, Township 8 South, Range 18 West. Between Ochre Mountain and Clifton Flat in the Deep Creek Mountains southwest of Gold Hill as shown on the accompanying map.

SOILS AND GEOLOGY:

Soils in the area are sandy and will be stockpiled prior to disturbance. Upon completion of mining the topsoil will be spread over the area of disturbance, and will be revegetated.

Geology of the area consists of Quaternary Alluvium overlaying the Ely and Arcturus Formations.

HYDROLOGY:

Surface water in the area consists of ephemeral streams, which flow in response to summer thunderstorms and spring snowmelt.

Groundwater use consists primarily of Skinner Spring. Little groundwater development exists at the present time. A.U. Associates is undertaking some groundwater drilling at the present time to better define the local system and to provide water for the mine operation.

ECOLOGY:

The area is sparsely vegetated with sagebrush, rabbitbrush, perennial and annual grasses and some forbs.

The area is presently used for cattle grazing and mining activities.

STRUCTURES AND FACILITIES:

The surface disturbance shall be confined to 30 acres at any one time and shall consist of: an open pit approximately 15 acres in size, office building, bathhouse, warehouse, shop, power substation, fuel storage, powder magazine, and waste rock disposal facility and ore stockpile.

MINING AND RECLAMATION PLAN:

During Operations:

1. Surface mining will be conducted in a safe, orderly, and minerlike fashion.
2. Soil from areas of new surface disturbance will be removed and properly stockpiled.
3. Surface drainages will be properly diverted utilizing culverts and ditches.
4. Areas of new surface disturbance will be kept to a minimum.

After Operations:

1. Extraneous debris, scrap metal, wood, and unuseable equipment and buildings will be buried or removed from the location.
2. All areas disturbed by this operation will be graded to stable slopes to the fullest extent possible, to which heavy equipment can be used, and stabilized by seeding with a specified seed mixture.
3. All roads, excepting main access roads, will be regraded and seeded.
4. Scarification and other soil treatment techniques will be employed on compacted surfaces before seeding.
5. Pre-disturbed areas not affected by the proposed mining operation may be regraded depending upon the proximity of the area to disturbed sites and general feasibility of each area.

IMPACTS:

The reclamation plan will mitigate environmental and safety hazards.

SURETY:

Reclamation surety for this operation was estimated to be \$18,890.00 which includes a 13% inflation for 5 years of the mine life, to be readjusted as required at a review every 5 years.

The surety estimate includes the following work:

1. Removal of structures and equipment.
2. Removal of trash and debris.
3. Leveling of ancillary facilities and access roads.
4. Recontouring excavations.
5. Spreading of soils or surficial materials.
6. Soil stabilization, scarification, seeding of disturbed areas.
7. 13% inflation.

A copy of the reclamation surety is enclosed.



# DIVISION OF OIL, GAS, AND MINING

## BOND ESTIMATE

OPERATOR: A.U. Associates  
 MINE NAME: Rocking Chair Mine  
 LOCATION: Sec. 10, 14-16, 21-23, 28, 33 & 34, T. 8S., R. 18W.  
 COUNTY: Tooele  
 DATE: October 21, 1980

	Operation	Amount	Rate	Cost
A.	CLEAN-UP			
	1. Removal of structures & equipment.	200 man hours	\$ 5.00/hr	\$ 1,000.00
	2. Removal of trash & debris.	100 man hours	\$ 5.00/hr	\$ 500.00
	3. Leveling of ancillary facilities pads and access roads.	35 truck hrs.	\$10.00/hr	\$ 350.00
B.	REGRADEING & RECONTOURING			
	1. Earthwork including haulage and grading of spoils, waste and overburden.	20 cat hours	\$65.00/hr	\$ 1,300.00
	2. Recontouring of highwalls and excavations.	9 loader hrs	\$30.00/hr	\$ 270.00
	3. Spreading of soil or surficial materials.			
C.	STABILIZATION			
	1. Soil preparation, scarification, fertilization, etc.	700 lbs. seed	\$ 3.20/lb	\$ 2,240.00
	2. Seeding or planting.	36 man hours	\$ 5.00/hr	\$ 180.00
	3. Construction of terraces, waterbars, etc.	14½ tractor hr	\$30.00/hr	\$ 435.00
D.	LABOR			
	1. Supervision.	15 man hours	\$ 9.50/hr	\$ 142.50
	2. Labor exclusive of bulldozer time.	17 man hours	\$ 5.00/hr	\$ 85.00
E.	SAFETY			
	1. Erection of fences, portal coverings, etc.	17 man hours	\$ 5.00/hr	\$ 85.00
	2. Removal or neutralization of explosive or hazardous materials.	300 lbs dry chemical	\$ 2.70/lb(av)	\$ 810.00
F.	MONITORING			
	1. Continuing or periodic monitoring, sampling & testing deemed necessary.	Reseeding	Lump sum	\$ 2,855.00
G.	OTHER			
			Subtotal	\$10,252.50
	1. Inflation (13%) for 5 years.			\$ 8,637.50
			TOTAL	\$18,890.00